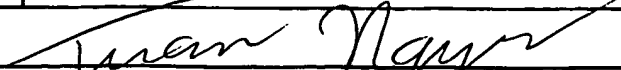
 FORM PTO-1449		Page 1 of 7			
		ATTY. DOCKET NO. 2005.0020003		APPLICATION NO. 09/604,097	
		APPLICANTS Yukio SHAKUDA			
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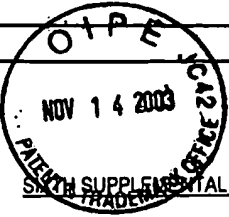
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1	AD40	2556211 B2	11/1996	JP			Abstract Enclosed

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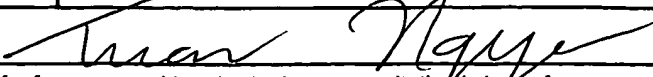
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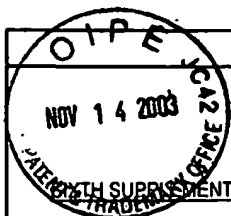
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FORM PTO-1449

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2828

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EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
TN	AA42	2631286 B2	07/1997	JP			Abstract Enclosed
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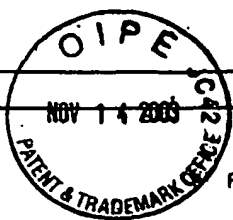
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	APPLICANTS Yukio SHAKUDA	
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I	AD45	2917742 B2	07/1999	JP			Abstract Enclosed

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Yukio SHAKUDAFILING DATE
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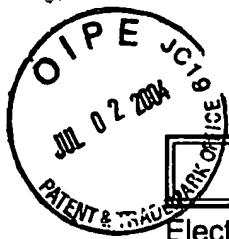
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ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18
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Title of Invention	Semiconductor Light Emitting Device and Manufacturing Method Therefor																																																																																																					
<div>Application Number: 09/604097</div> <div>Confirmation Number: 6648</div> <div>First Named Applicant: Yukio SHAKUDA</div> <div>Attorney Docket Number: 2005.0020003</div> <div>Art Unit: 2828</div> <div>Examiner: Tuan N. Nguyen</div> <div>Search string: (3226270 or 3364084 or 3433684 or 3604991 or 3733561 or 3758875 or 3819974 or 3983509 or 3984262 or 4063189 or 4249142 or 4328469 or 4335461 or 4371966 or 4675709 or 4839899 or 4984242 or 4999841 or 5008718 or 5023880 or 5048036 or 5060028 or 5138404 or 5153148 or 5164798 or 5212705 or 5233204 or 5235609 or 5252466 or 5301202 or 5359209 or 5369658 or 5395792 or 5483547 or 5555271 or 5583881 or 5689123 or 6009112).pn.</div> <div>US Patent Documents</div> <div>Note: Applicant is not required to submit a paper copy of cited US Patent Documents</div> <table border="1"><thead><tr><th>init</th><th>Cite.No.</th><th>Patent No.</th><th>Date</th><th>Patentee</th><th>Kind</th><th>Class</th><th>Subclass</th></tr></thead><tbody><tr><td></td><td>1</td><td>3226270</td><td>1965-12-28</td><td>Miederer et al.</td><td></td><td></td><td></td></tr><tr><td></td><td>2</td><td>3364084</td><td>1968-01-16</td><td>Ruehrwein</td><td></td><td></td><td></td></tr><tr><td></td><td>3</td><td>3433684</td><td>1969-03-18</td><td>Zanowick et al.</td><td></td><td></td><td></td></tr><tr><td></td><td>4</td><td>3604991</td><td>1971-09-14</td><td>Yonezu et al.</td><td></td><td></td><td></td></tr><tr><td></td><td>5</td><td>3733561</td><td>1973-05-15</td><td>Hayashi</td><td></td><td></td><td></td></tr><tr><td></td><td>6</td><td>3758875</td><td>1973-09-11</td><td>Hayashi</td><td></td><td></td><td></td></tr><tr><td></td><td>7</td><td>3819974</td><td>1974-06-25</td><td>Stevenson et al.</td><td></td><td></td><td></td></tr><tr><td></td><td>8</td><td>3983509</td><td>1976-09-28</td><td>Scifres et al.</td><td></td><td></td><td></td></tr><tr><td></td><td>9</td><td>3984262</td><td>1976-10-05</td><td>Burnham et al.</td><td></td><td></td><td></td></tr><tr><td></td><td>10</td><td>4063189</td><td>1977-12-13</td><td>Scifres et al.</td><td></td><td></td><td></td></tr><tr><td></td><td>11</td><td>4249142</td><td>1981-02-03</td><td>Burnham et al.</td><td></td><td></td><td></td></tr></tbody></table>							init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass		1	3226270	1965-12-28	Miederer et al.					2	3364084	1968-01-16	Ruehrwein					3	3433684	1969-03-18	Zanowick et al.					4	3604991	1971-09-14	Yonezu et al.					5	3733561	1973-05-15	Hayashi					6	3758875	1973-09-11	Hayashi					7	3819974	1974-06-25	Stevenson et al.					8	3983509	1976-09-28	Scifres et al.					9	3984262	1976-10-05	Burnham et al.					10	4063189	1977-12-13	Scifres et al.					11	4249142	1981-02-03	Burnham et al.			
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	12	4328469	1982-05-04	Scifres et al.
	13	4335461	1982-06-15	Streifer et al.
	14	4371966	1983-02-01	Scifres et al.
	15	4675709	1987-06-23	Scifres et al.
	16	4839899	1989-06-13	Burnham et al.
	17	4984242	1991-01-08	Scifres et al.
	18	4999841	1991-03-12	Sakiyama et al.
	19	5008718	1991-04-16	Fletcher et al.
	20	5023880	1991-06-11	Suzuki et al.
	21	5048036	1991-09-10	Scifres et al.
	22	5060028	1991-10-22	Kuo et al.
	23	5138404	1992-08-11	Ishikawa et al.
	24	5153148	1992-10-06	Sakiyama et al.
	25	5164798	1992-11-17	Huang
	26	5212705	1993-05-18	Kahen et al.
	27	5233204	1993-08-03	Fletcher et al.
	28	5235609	1993-08-10	Uchida et al.
	29	5252466	1993-10-12	Cronan, Jr.
	30	5301202	1994-04-05	Harder et al.
	31	5359209	1994-10-25	Huang
	32	5369658	1994-11-29	Ikawa et al.
	33	5395792	1995-03-07	Ikawa et al.
	34	5483547	1996-01-09	Adams et al.
	35	5555271	1996-09-10	Honda et al.
	36	5583881	1996-12-10	Uchida et al.
	37	5689123	1997-11-18	Major et al.
	38	6009112	1999-12-28	Uchida

Signature

Examiner Name	Date
<i>Wan Ng</i>	8/21/04



FORM PTO-1449

**SEVENTH SUPPLEMENTAL
INFORMATION DISCLOSURE STATEMENT**ATTY. DOCKET NO.
2005.0020003APPLICATION NO.
09/604,097INVENTOR
Yukio SHAKUDAFILING DATE
June 27, 2000ART UNIT
2828**FOREIGN PATENT DOCUMENTS**

EXAMINER INITIAL	DOC. REF.	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
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TN	AC46	1,325,582	12/1993	CA			N/A
I	AD46	0 356 059 A2	02/1990	EP			N/A

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

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TN	AK47	<i>Response of Nichia America Corporation To Amended Complaint of Rohm Co., Ltd. And Notice of Investigation, with Exhibits D-H, 120 Pages, Dated February 13, 2001 In the Matter of Certain Semiconductor Light Emitting Devices, Components Thereof, and Products Containing Same, Investigation No. 337-TA-444 before the U.S. International Trade Commission.</i>

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	INVENTOR Yukio SHAKUDA	
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FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOC. REF.	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
TN	AA47	778,383	07/1957	GB			N/A
	AB47	1,011,979	12/1965	GB			N/A
	AC47	2-74088 A	03/1990	JP			Abstract Enclosed
	AD47	2-111016 A	04/1990	JP			Abstract Enclosed

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

TN	AE48	<i>Respondent Nichia Corporation's Objections and Responses To Complainant Rohm Co., Ltd.'s Fourth Set of Interrogatories Nos. 110-120, 20 Pages, Dated March 28, 2001 In the Matter of Certain Semiconductor Light Emitting Devices, Components Thereof, and Products Containing Same, Investigation No. 337-TA-444 before the U.S. International Trade Commission.</i>
	AF48	<i>Order No. 6: Denying Motion of Respondents Nichia Corporation and Nichia America Corporation for Sanctions for Abuse of Commission Process, and to Show Cause Why Rohm Co. Ltd. Has Not Violated Commission Rule 210.4(c), 12 Pages, Dated June 27, 2001 In the Matter of Certain Semiconductor Light Emitting Devices, Components Thereof, and Products Containing Same, Investigation No. 337-TA-444 before the U.S. International Trade Commission.</i>
	AG48	<i>Response and Counterclaim of Nichia Corporation and Nichia America Corporation, 27 Pages, Dated November 9, 2001, in Rohm Co., Ltd. v. Nichia Corporation and Nichia America Corporation v. Rohm Co., Ltd., and Cree, Inc., Civil Action No. 00-CV-6379, U.S. District Court for the Eastern District of Pennsylvania.</i>
	AH48	<i>Notice, 4 Pages, Dated March 8, 2002 In the Matter of Certain Semiconductor Light Emitting Devices, Components Thereof, and Products Containing Same, Investigation No. 337-TA-444 before the U.S. International Trade Commission.</i>
	AI48	<i>Nichia's Expedited Motion to Declare Rohm's Certificates of Correction Ineffective for this Action, 3 Pages, Dated June 26, 2003, in Rohm Co., Ltd. v. Nichia Corporation and Nichia America Corporation v. Rohm Co., Ltd., Civil Action No. 00-CV-6379, U.S. District Court for the Eastern District of Pennsylvania.</i>
	AJ48	<i>Memorandum in Support of Nichia's Expedited Motion to Declare Rohm's Certificates of Correction Ineffective for this Action, with Exhibits A-H, 61 Pages, Dated June 26, 2003, in Rohm Co., Ltd. v. Nichia Corporation and Nichia America Corporation v. Rohm Co., Ltd., Civil Action No. 00-CV-6379, U.S. District Court for the Eastern District of Pennsylvania.</i>
	AK48	<i>Nichia Corporation's Objections and Responses to Rohm's Second Set of Interrogatories (Nos. 9-15), 16 Pages, Dated July 10, 2003, in Rohm Co., Ltd. v. Nichia Corporation and Nichia America Corporation v. Rohm Co., Ltd., Civil Action No. 00-CV-6379, U.S. District Court for the Eastern District of Pennsylvania.</i>

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	AC48	4-111375 A	04/1992	JP			Abstract Enclosed
	AD48	4-130692 A	05/1992	JP			Abstract Enclosed

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

TN	AE49	<i>Nichia's Brief in Opposition to Rohm's Motion for Leave to File a Supplemental Pleading and in Support of Nichia's Expedited Motion to Declare Rohm's Certificates of Correction Ineffective for this Action, 7 Pages, Dated July 22, 2003, in Rohm Co., Ltd. v. Nichia Corporation and Nichia America Corporation v. Rohm Co., Ltd., Civil Action No. 00-CV-6379, U.S. District Court for the Eastern District of Pennsylvania.</i>
	AF49	<i>Nichia's Motion to Strike the '899 Patent from the Case, 3 Pages, Dated September 11, 2003, in Rohm Co., Ltd. v. Nichia Corporation and Nichia America Corporation v. Rohm Co., Ltd., Civil Action No. 00-CV-6379, U.S. District Court for the Eastern District of Pennsylvania.</i>
	AG49	<i>Memorandum in Support of Nichia's Motion to Strike the '899 Patent from the Case, with Exhibits 1-2, 63 Pages, Dated September 11, 2003, in Rohm Co., Ltd. v. Nichia Corporation and Nichia America Corporation v. Rohm Co., Ltd., Civil Action No. 00-CV-6379, U.S. District Court for the Eastern District of Pennsylvania.</i>
	AH49	<i>Brief of Rohm Co., Ltd. in Opposition to Nichia's Motion to Strike the '899 Patent from the Case, with Exhibits 1-4, 29 Pages, Dated September 25, 2003, in Rohm Co., Ltd. v. Nichia Corporation and Nichia America Corporation v. Rohm Co., Ltd., Civil Action No. 00-CV-6379, U.S. District Court for the Eastern District of Pennsylvania.</i>
	AI49	<i>Nichia's Opposition to Rohm's Motion to Compel, with Exhibit 1, 48 Pages, Dated September 26, 2003, in Rohm Co., Ltd. v. Nichia Corporation and Nichia America Corporation v. Rohm Co., Ltd., Civil Action No. 00-CV-6379, U.S. District Court for the Eastern District of Pennsylvania.</i>
	AJ49	<i>Reply Memorandum in Support of Nichia's Motion to Strike the '899 Patent from the Case, 10 Pages, Dated October 2, 2003, in Rohm Co., Ltd. v. Nichia Corporation and Nichia America Corporation v. Rohm Co., Ltd., Civil Action No. 00-CV-6379, U.S. District Court for the Eastern District of Pennsylvania.</i>
	AK49	<i>Nichia's Emergency Motion to Compel the Deposition of Alleged Sole Inventor Yukio Shakuda to Proceed on January 30, 2004 and to Compel Shakuda to Review and Bring Documents Supporting His Alleged Inventorship, with Proposed Order, 7 Pages, Dated October 8, 2003, in Rohm Co., Ltd. v. Nichia Corporation and Nichia America Corporation v. Rohm Co., Ltd., Civil Action No. 00-CV-6379, U.S. District Court for the Eastern District of Pennsylvania.</i>

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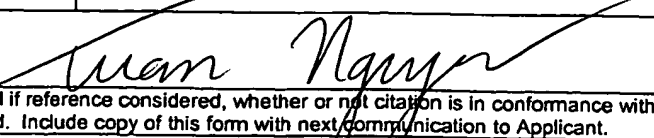
SEVENTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT	ATTY. DOCKET NO. 2005.0020003	APPLICATION NO. 09/604,097
	INVENTOR Yukio SHAKUDA	
	FILING DATE June 27, 2000	ART UNIT 2828

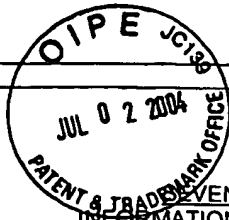
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	AB49	4-309281 A	10/1992	JP			Abstract Enclosed
	AC49	5-160504 A	06/1993	JP			Abstract Enclosed
	AD49	2908815 B2	04/1999	JP			Abstract Enclosed

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TN	AE50	Brief in Support of Nichia's Emergency Motion to Compel the Deposition of Alleged Sole Inventor Yukio Shakuda to Proceed on January 30, 2004 and to Compel Shakuda to Review and Bring Documents Supporting His Alleged Inventorship, with Exhibits A-D, 33 Pages, Dated October 8, 2003, in Rohm Co., Ltd. v. Nichia Corporation and Nichia America Corporation v. Rohm Co., Ltd., Civil Action No. 00-CV-6379, U.S. District Court for the Eastern District of Pennsylvania.
	AF50	Clarification to Nichia's Motion to Strike the '899 Patent from the Case and Nichia's Response to Rohm's Motion to Compel, with Exhibits A-C, 16 Pages, Dated October 14, 2003, in Rohm Co., Ltd. v. Nichia Corporation and Nichia America Corporation v. Rohm Co., Ltd., Civil Action No. 00-CV-6379, U.S. District Court for the Eastern District of Pennsylvania.
	AG50	Reply Memorandum in Support of Nichia's Motion Compel, with Exhibit 1, 24 Pages, Dated November 3, 2003, in Rohm Co., Ltd. v. Nichia Corporation and Nichia America Corporation v. Rohm Co., Ltd., Civil Action No. 00-CV-6379, U.S. District Court for the Eastern District of Pennsylvania.
	AH50	Reply Brief in Support of Nichia's Emergency Motion to Compel the Deposition of Alleged Sole Inventor Yukio Shakuda to Proceed on January 30, 2004 and to Compel Shakuda to Review and Bring Documents Supporting His Alleged Inventorship, with Exhibits A-D, 29 Pages, Dated December 4, 2003, in Rohm Co., Ltd. v. Nichia Corporation and Nichia America Corporation v. Rohm Co., Ltd., Civil Action No. 00-CV-6379, U.S. District Court for the Eastern District of Pennsylvania.
	AI50	Motion and Stipulation of Voluntary Dismissal with Prejudice Pursuant to Federal Rule of Civil Procedure 41(a)(2), 2 Pages, Dated February 12, 2004, in Rohm Co., Ltd. v. Nichia Corporation and Nichia America Corporation, Civil Action No. 00-CV-6379, U.S. District Court for the Eastern District of Pennsylvania.
	AJ50	"Hole Compensation Mechanism of p-Type GaN Films," 9 pages.
	AK50	"Shallow Impurity Passivation by Atomic Hydrogen," 14 pages.

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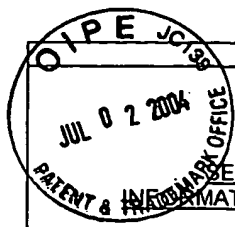
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	AF51	Thompson, G.H.B. and Kirkby, P.A., "(GaAl)As Lasers With a Heterostructure for Optical Confinement and Additional Heterojunctions for Extreme Carrier Confinement," <i>IEEE Journal of Quantum Electronics</i> , Vol. QE-9, No. 2, pp. 311-318 (February 1973).
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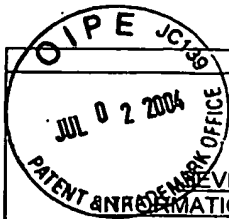
TN	AE52	Thompson, G.H.B., <i>Physics of Semiconductor Laser Devices</i> , John Wiley & Sons, pp. 262-268 (1980).
	AF52	Botez, D., "cw high-power single-mode operation of constricted double-heterojunction AlGaAs lasers with a large optical cavity," <i>Applied Physics Letters</i> , Vol. 36, No. 3, American Institute of Physics, pp. 190-192 (February 1, 1980).
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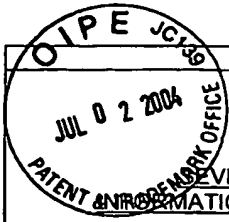
TU	AE53	Sah, C.-T. <i>et al.</i> , "Study of the atomic models of three donor-like traps on oxidized silicon with aluminum gate from their processing dependencies," <i>Journal of Applied Physics</i> , Vol. 54, No. 10, American Institute of Physics, pp. 5864-5879 (October 1983).
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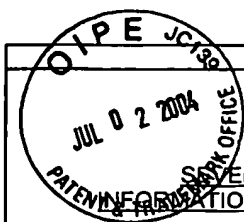
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TN	AE55	Moustakas, T.D. and Molnar, R.J., "Growth and Doping of GaN Films by ECR-Assisted MBE," <i>Mat. Res. Soc. Symp. Proc.</i> , Vol. 281, Materials Research Society, pp. 753, 755, 757, 759, 761 and 763 (1993).
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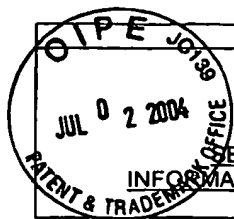
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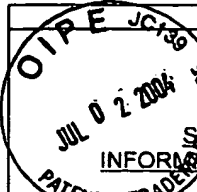
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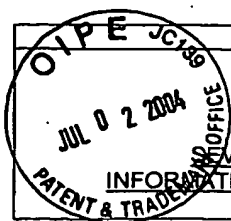
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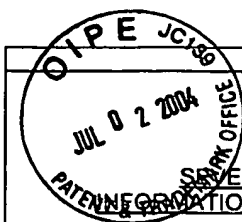
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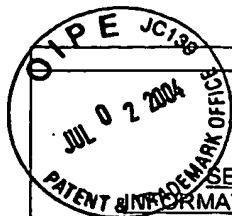
OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

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I	AF60	Murata, H. <i>et al.</i> , "Low Threshold Current Density of 620 nm Band MQW-SCH AlGaInP Semiconductor Lasers With Mg Doped AlInP Cladding Layer," <i>Electronics Letters</i> , Vol. 27, No. 17, IEE, pp. 1569-1571 (August 15, 1991).
	AG60	Shah, P. and Mitin, V., "Threshold Characteristics of Blue to Ultraviolet Light Emitting Semiconductor Lasers Based on the AlGaIn Material System," <i>IEEE</i> , pp. 160-169 (1995).
	AH60	Kolbas, R.M. and Krishnankutty, S., "Optoelectronic Properties of GaN, AlGaIn and AlGaIn-GaN Quantum Well Heterostructures," pp. 19-20.
	AI60	Akasaki, I. and Amano, H., "UV/Blue Light Emitting AlGaIn/GaN Heterostructures," pp. 14-15.
	AJ60	Benchimol, J.L. <i>et al.</i> , "Growth and modelling of InAsPSb. InAs double heterostructures," <i>Inst. Phys. Conf. Ser. No. 83: Chapter 7 - Paper presented at Int. Symp. GaAs and Related Compounds, Las Vegas, Nevada</i> , IOP Publishing Ltd., pp. 385-390 (September 28 - October 1, 1986).
	AK60	Suemune, I., "Theoretical Estimation of Leakage Current in II-VI Heterostructure Lasers," <i>Japanese Journal of Applied Physics</i> , Vol. 31, Part 2, No. 2A, pp. L95-L98 (February 1, 1992).

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2005.0020003APPLICATION NO.
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Yukio SHAKUDAFILING DATE
June 27, 2000ART UNIT
2828

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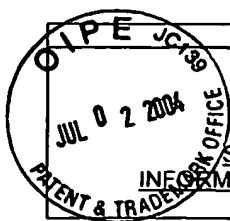
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TN	AE61	Watanabe, M.O. and Ohba, Y., "Interface properties for GaAs/InGaAlP heterojunctions by the capacitance-voltage profiling technique," <i>Applied Physics Letters</i> , Vol. 50, No. 14, American Institute of Physics, pp. 906-908 (April 6, 1987).
	AF61	Yablonovitch, E. and Kane, E.O., "Reduction of Lasing Threshold Current Density by the Lowering of Valence Band Effective Mass," <i>Journal of Lightwave Technology</i> , Vol. LT-4, No. 5, IEEE, pp. 504-506 (May 1986).
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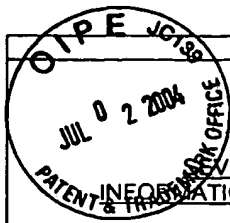
TN	AE62	Khan, M.A. <i>et al.</i> , "Vertical-cavity, room-temperature stimulated emission from photopumped GaN films deposited over sapphire substrates using low-pressure metalorganic chemical vapor deposition," <i>Applied Physics Letters</i> , Vol. 58, No. 14, American Institute of Physics, pp. 1515-1517 (April 8, 1991).
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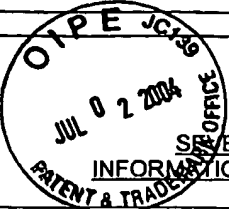
OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

TN	AE63	Amano, H. <i>et al.</i> , "Room-Temperature Low-Threshold Surface-Stimulated Emission by Optical Pumping from $Al_{0.1}Ga_{0.9}N/GaN$ Double Heterostructure," <i>Japanese Journal of Applied Physics</i> , Vol. 32, Part 2, No. 7B, pp. L1000-L1002 (July 15, 1993).
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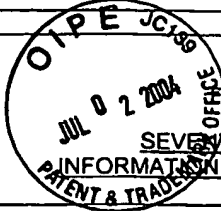
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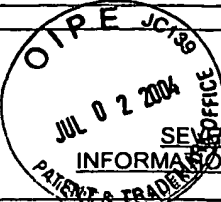
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OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

TN	AE65	Akasaki, I. and Amano, H., "Conductivity Control of AlGaIn, Fabrication of AlGaIn/GaN Multi-Heterostructure and Their Application to UV/Blue Light Emitting Devices," <i>Materials Research Society Symposium Proceedings</i> , Vol. 242, Materials Research Society, pp. 383-394 (1992).
	AF65	Sturge, M.D. (ed.), <i>Journal of Luminescence: An Interdisciplinary Journal of Research on Excited State Processes in Condensed Matter</i> , Vols. 48 and 49, Part II, North-Holland, Cover page (1991).
	AG65	<i>Japanese Journal of Applied Physics</i> , Vol. 29, No. 4, Part 2 Letters, Table of Contents (April 1990).
	AH65	Christou, A. and Rupprecht, H.S. (eds.), <i>Proceedings of the Fourteenth International Symposium on Gallium Arsenide and Related Compounds held in Heraklion, Crete, IOP Publishing Ltd.</i> , Cover page (September 28 - October 1, 1987).
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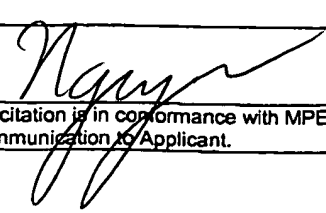
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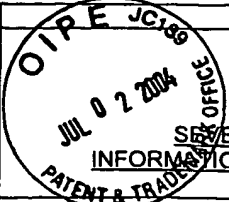
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TN	AE66	Amano, H. and Akasaki, I., "Present and future prospects of GaN-based short-wavelength, light emitting devices," <i>Oyo Buturi</i> , Vol. 63, No. 12, pp. 1243-1247 (December 12, 1994).
	AF66	Japanese Article from <i>Science Forum</i> , 6 pages (1986).
	AG66	Blakemore, J.S., "Semiconducting and other major properties of gallium arsenide," <i>Journal of Applied Physics</i> , Vol. 53, No. 10, American Institute of Physics, pp. R123-R130 and R132-R181 (October 1982).
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	AI66	Nagata, F. and Kakibayashi, H., "Electron Microscopy for Compound Semiconductors," <i>J. Electron Microsc.</i> , Vol. 34, No. 4, pp. 311 and 313-315 (1985).
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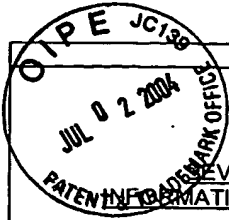
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TN	AE67	Covington, B.C. <i>et al.</i> , "Infrared intersubband absorption in GaAs/AlAs multiple quantum wells," <i>Applied Physics Letters</i> , Vol. 54, No. 21, American Institute of Physics, pp. 2145 and 2147 (May 22, 1989).
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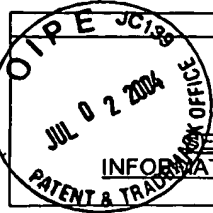
TN	AE68	Ekenberg, U., "Enhancement of nonparabolicity effects in a quantum well," <i>Physical Review B</i> , Vol. 36, No. 11, The American Physical Society, pp. 6152 and 6154 (October 15, 1987).
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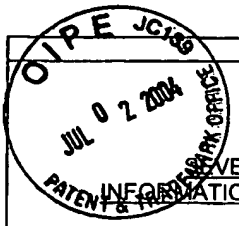
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TN	AE69	Xu, Y.-N. and Ching, W.Y., "Electronic, optical, and structural properties of some wurtzite crystals," <i>Physical Review B</i> , Vol. 48, No. 7, The American Physical Society, pp. 4335-4348 (August 15, 1993).
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FORM PTO-1449

SEVENTH SUPPLEMENTAL
INFORMATION DISCLOSURE STATEMENTATTY. DOCKET NO.
2005.0020003APPLICATION NO.
09/604,097INVENTOR
Yukio SHAKUDAFILING DATE
June 27, 2000ART UNIT
2828

Page 24 of 24

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	AC						N/A
	AD						N/A

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

ATTORNEY'S DKT No.
033022-004

APPLICATION No.
09/604,097

APPLICANT
Yukio Shakuda

FILING DATE
June 27, 2000

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2874

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Examiner Signature	<i>Tran Nguyen</i>
Date Considered	8/27/04

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Examiner Initials	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication (MM-DD-YYYY)
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Examiner Signature	Tuan Nguyen	Date Considered	8/27/04

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INFORMATION DISCLOSURE
STATEMENT BY APPLICANTATTORNEY'S DKT NO.
033022-004APPLICATION NO.
09/604,097APPLICANT
Yukio ShakudaFILING DATE
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U.S. PATENT DOCUMENTS

Examiner Initials	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication (MM-DD-YYYY)
	Number	Kind Code (if known)		

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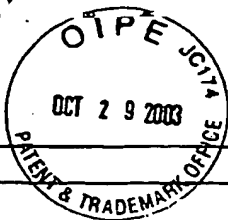
Examiner Initials	Foreign Patent Document		Country	Date of Publication (MM-DD-YYYY)	Translation	
	Number	Kind Code (if known)			Yes	no

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	Response letter to Oppositions by A.A. Thornton & Co., dated March 3, 2000
Examiner Signature	<i>Iran Narye</i>
Date Considered	8/27/04

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FORM PTO-1449

FIFTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.
2005.0020003APPLICATION NO.
09/604,097APPLICANTS
Yukio SHAKUDAFILING DATE
June 27, 2000GROUP
2828

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8/27/04

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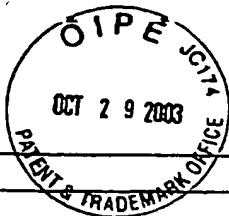
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TN	AA5	4-10665 A	01/1992	JP			Abstract Enclosed
	AB5	4-15200 B2	03/1992	JP			Abstract Enclosed
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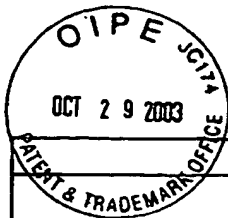
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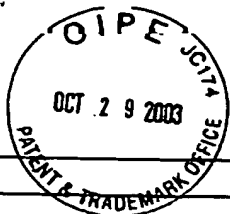
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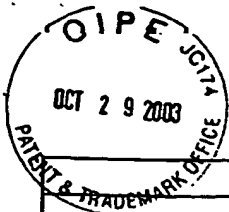
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	AC10	5-175124 A	07/1993	JP			Abstract Enclosed
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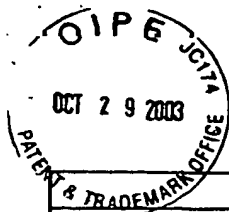
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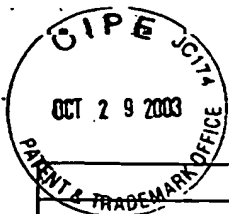
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TN	AE14	Bhattacharya, P.K. et al., "Low defect densities in molecular beam epitaxial GaAs achieved by isoelectronic In doping," <i>Appl. Phys. Lett.</i> 49(8), American Institute of Physics, pp. 470-472 (August 25, 1986).
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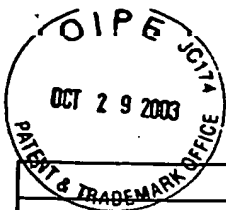
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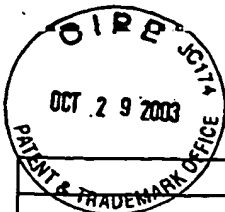
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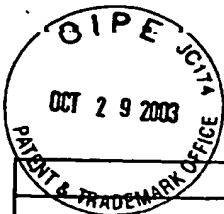
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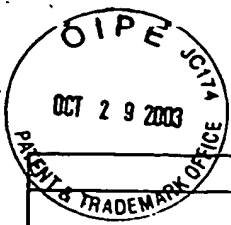
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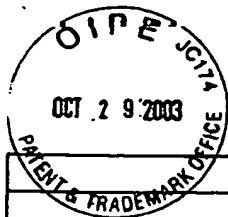
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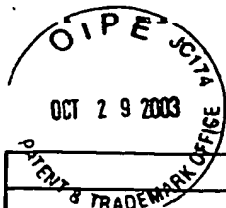
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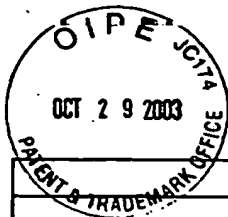
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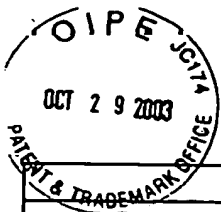
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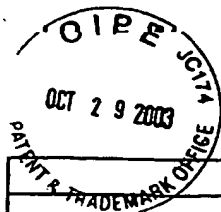
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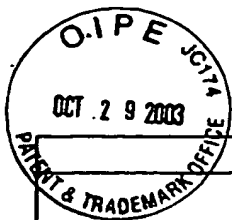
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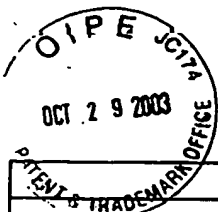
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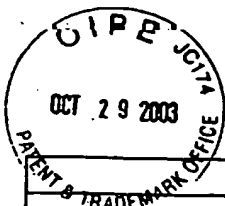
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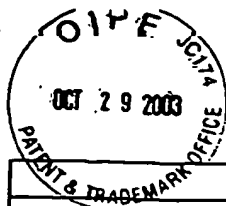
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EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
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OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

TN	AE43	Eliseev, P.G. <i>et al.</i> , "Impurity-Related Photoluminescence From InGaN LED Material," pp. 104-105.
	AF43	Kishino, S. <i>et al.</i> , "Half-width and peak-intensity measurement of a rocking curve obtained from silicon on sapphire using soft x-ray beams," <i>Journal of Applied Physics</i> , Vol. 48, No. 7, American Institute of Physics, pp. 3138-3140 (July 1977).
	AG43	Palummo, M. <i>et al.</i> , "Electronic Structure of Cubic GaN with Self-Energy Corrections," <i>Europhysics Letters</i> , 26 (8), pp. 607-612 (1994).
	AH43	Bulman, G.E. <i>et al.</i> , "Demonstration of a Cleaved-Facet InGaN/GaN MQW SCH Laser Grown on 6H-SiC," 2 pages.
	AI43	Trilhe, J. <i>et al.</i> , "Characterization Of The Silicon-Sapphire Interface," <i>Journal of Crystal Growth</i> 45, North-Holland Publishing Company, pp. 439-444 (1978).
	AJ43	Sun, C.J. <i>et al.</i> , "Thermal stability of GaN thin films grown on (0001) Al ₂ O ₃ , (0112) Al ₂ O ₃ and (0001) _{Si} 6H-SiC substrates," <i>J. Appl. Phys.</i> 76 (1), American Institute of Physics, pp. 236-241 (July 1, 1994).
	AK43	Hsu, S.T., "Electron Mobility in SOS Films," <i>IEEE Transactions on Electron Devices</i> , Vol. ED-25, No. 8, IEEE, pp. 913-916 (August 1978).

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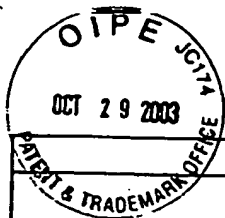
TN	AE44	Rubio, A. <i>et al.</i> , "Quasiparticle band structures of short-period superlattices and ordered alloys of AlN and GaN," <i>Physical Review B</i> , Vol. 49, No. 3, The American Physical Society, pp. 1952-1956 (January 15, 1994).
	AF44	Shul, R.J. <i>et al.</i> , "Plasma-Induced-Damage of GaN," <i>Electrochemical Society Proceedings</i> , Vol. 96-15, pp. 232-243.
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	AJ44	Shul, R.J. <i>et al.</i> , "Inductively Coupled Plasma Etching of GaN," 13 pages.
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TN	AE45	Pearlton, S.J. <i>et al.</i> , "Ar ⁺ -ion milling characteristics of III-V nitrides," <i>J. Appl. Phys.</i> 76(2), American Institute of Physics, pp. 1210-1215 (July 15, 1994).
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	AH45	Tojyo, T. <i>et al.</i> , "GaN-based High Power Blue-violet Laser Diodes," 5 pages.
	AI45	Koike, M. <i>et al.</i> , "RT-CW operation of GaN-based Laser Diodes improved by GaN/AlInN optical guiding lasers," 2 pages.
	AJ45	Lagerstedt, O. <i>et al.</i> , "Properties of GaN tunneling MIS light-emitting diodes," <i>J. Appl. Phys.</i> 49(5), American Institute of Physics, pp. 2953-2957 (May 1978).
	AK45	Self, K., "Prolog to Emerging Gallium Nitride Based Devices," <i>Proceedings Of The IEEE</i> , Vol. 83, No. 10, p. 1305 (October 1995).

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I	AF46	Goldenberg, B. <i>et al.</i> , "Ultraviolet and violet light-emitting GaN diodes grown by low-pressure metalorganic chemical vapor deposition," <i>Appl. Phys. Lett.</i> 62(4), American Institute of Physics, pp. 381-383 (January 25, 1993).
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	AH46	Wang, Y. and Mikkola, D.E., "Shock deformation of sapphire single crystals," <i>Materials Science and Engineering</i> , Elsevier Sequoia, pp. 25-32 (1991).
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TN	AE47	Wetzel, C. <i>et al.</i> , "Excitation Spectroscopy and Level Assignment in Piezoelectric Ga _{1-x} In _x N/GaN Quantum Wells," 2 pages.
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	AG47	Albanesi, E.A. <i>et al.</i> , "Theoretical study of the band offsets at GaN/AlN interfaces," <i>J. Vac. Sci. Technol. B</i> 12(4), American Vacuum Society, pp. 2470-2474 (July/August 1994).
	AH47	Dissanayake, A. <i>et al.</i> , "Low-temperature epitaxial growth and photoluminescence characterization of GaN," <i>Appl. Phys. Lett.</i> 65(18), American Institute of Physics, pp. 2317-2319 (October 31, 1994).
	AI47	Wickenden, D.K. <i>et al.</i> , "Thermally annealed GaN nucleation layers and the device-quality metal organic chemical vapor deposition growth of Si-doped GaN films on (00.1) sapphire," <i>J. Appl. Phys.</i> 75(11), American Institute of Physics, pp. 7585-7587 (June 1, 1994).
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